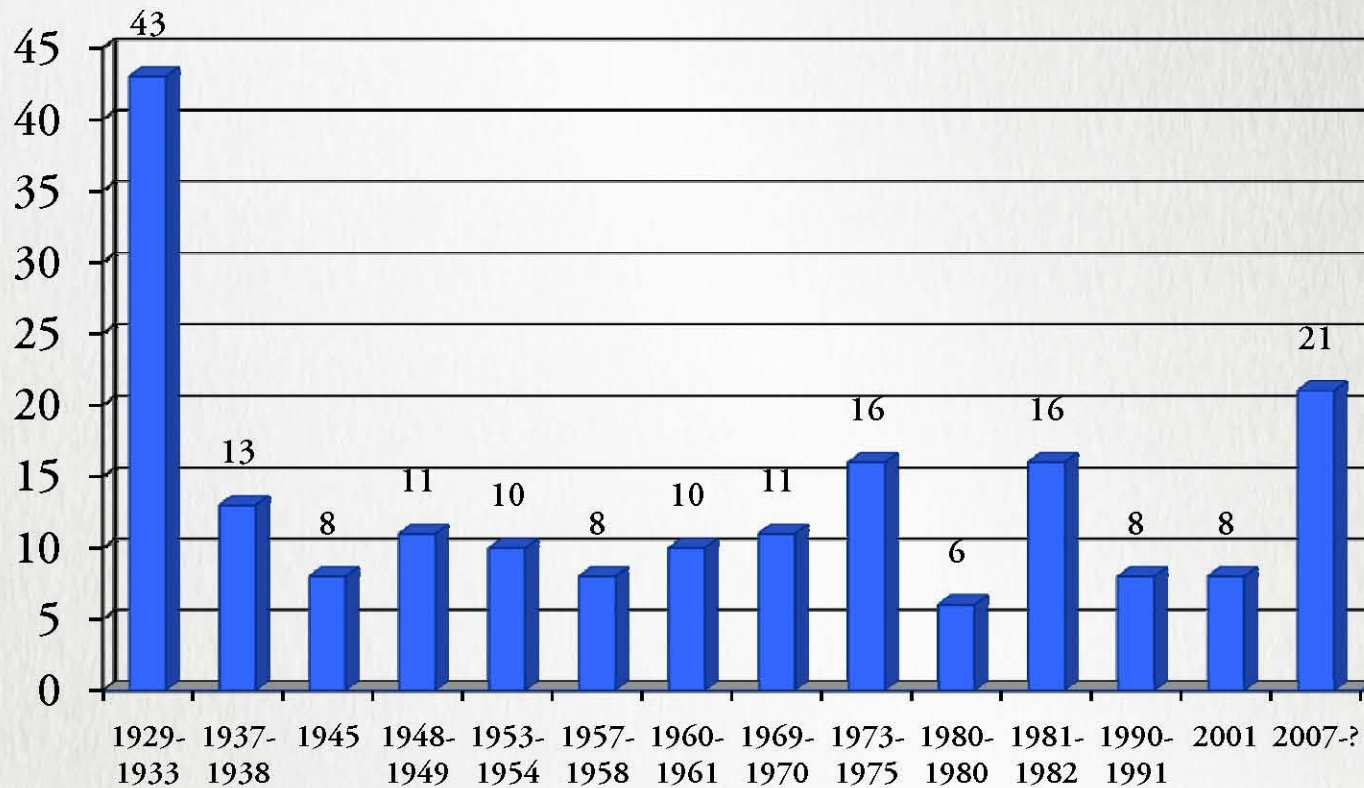


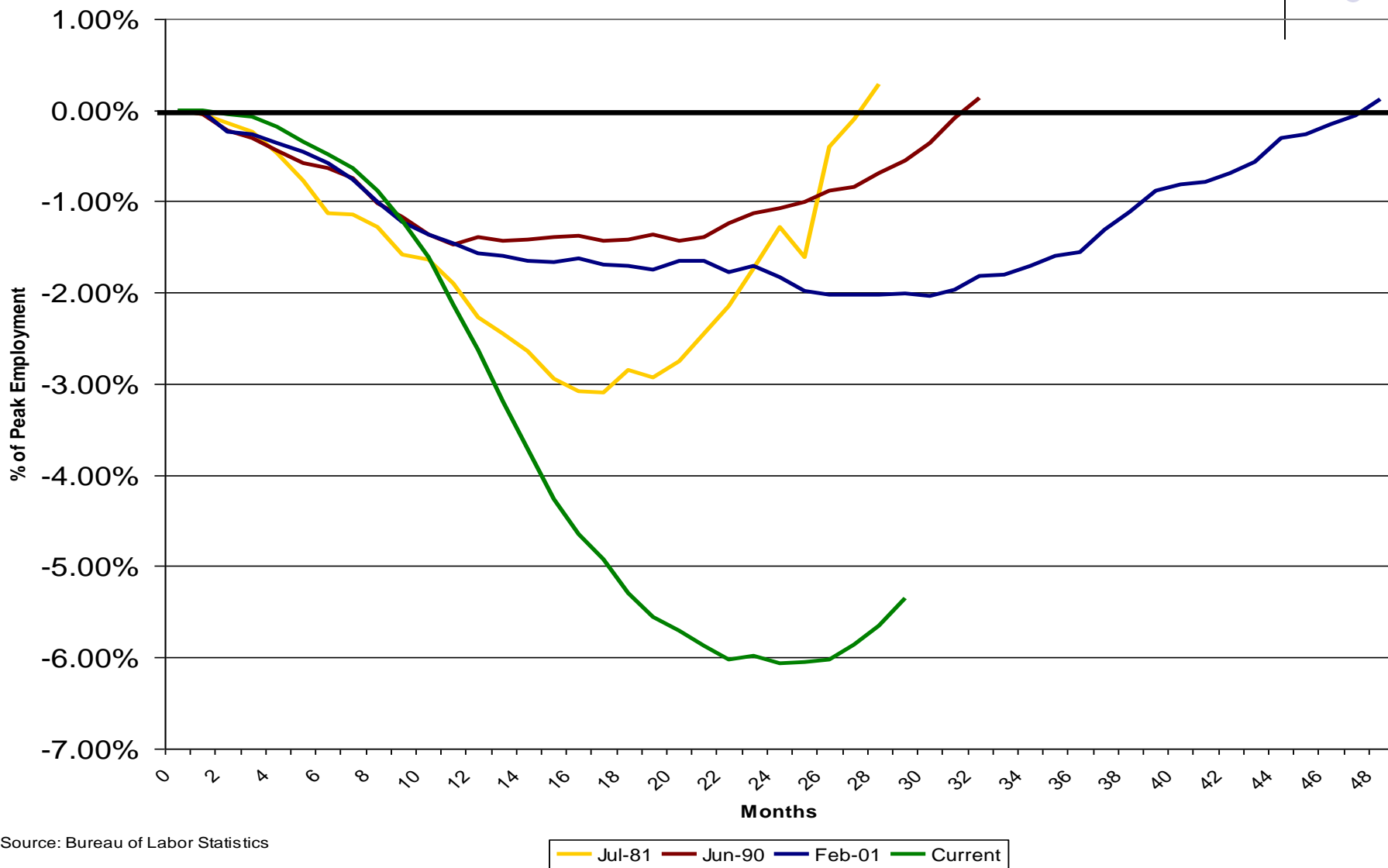
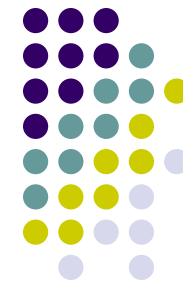


U.S. Business Cycle Downturns 1929-2009: Duration in Months



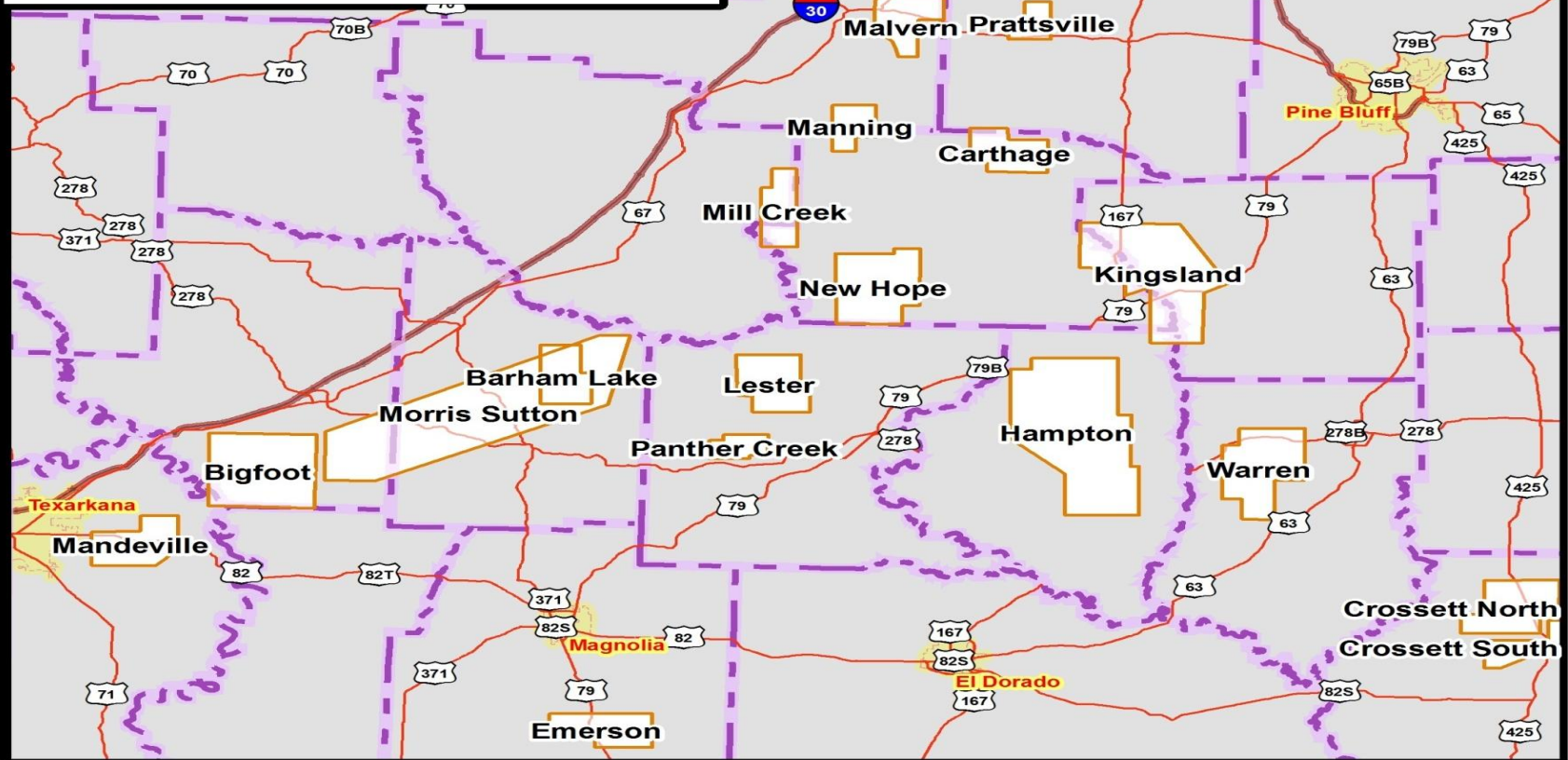
Percent Deviation from Peak Employment During Recessions

(U.S. Total Nonfarm Employment, Seasonally Adjusted)



South Arkansas Study Area

0 5 10 20 30 40 50 Miles



Lignite Mines



One located in Clark County and one located in Dallas County

Each mine provides:

- 200 full time employees
- Annual payroll of \$14.5 million
- Wage rate from \$17.20 to \$25.22 for operators
 - Skilled positions are above these rates
- Development cost for each mine \$135 million

Lignite Mines (continued)



- Each mine purchases \$18 million of supplies from the local economy
- Each mine provides additional ad valorem tax revenues of \$600K
- Royalties paid to landowners for each location \$1.8 million
- Each mine provides \$2 million in state sales tax revenue
- Each mine provides an additional \$350K in state severance tax

Economic Impact – Clark County



One time impacts:

- Total employment 875
- Total payroll \$44 million
- Additional GSP \$85 million

Annual impacts:

- Total employment 467
- Total payroll \$23 million
- Additional GSP \$52 million

Current Economics

- Total employment 10,000
- GSP \$622 million

Economic Impact – **Dallas County**



One time impacts:

- Total employment 875
- Total payroll \$44 million
- Additional GSP \$85 million

Annual impacts:

- Total employment 467
- Total payroll \$23 million
- Additional GSP \$52 million

Current economics:

- Total employment 3,340
- GSP \$186 million

Syncrude Economics



TOTAL RESOURCE VALUE

Arkansas Lignite Reserves = 4 billion tons
Microrefinery produces 2bbl Syncrude per ton
Potential = 8 Bbbl X \$80 = \$640 B

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## DAILY / ANNUAL PRODUCTION

10,000 tons per day = 20,000 bpd per mine site  
Cost = \$40 per bbl  
Market price = \$80 per bbl  
Annual revenue = \$584 million  
Annual profit = \$292 million  
4 billion tons / 20,000 per day = 200,000 days  
200,000 / 365 = 548 years